

THE FORCE AWAKENS
INCREDIBLE CROSS-SECTIONS

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INTRODUCTION

have existed for millennia. Fasterthan-light communication and travel are routine, and even commonplace devices often boast vast amounts of computing power. Droids serve as cheap and expendable labor on countless planets, taking myriad forms to perform tasks too complicated, dangerous, or tedious for their organic masters. The galaxy's factions also have access to

weapons of terrifying power, and defensive capabilities meant to neutralize them. Throughout the long history of the galaxy, war has always spurred technological innovation. The galaxy now finds itself on the cusp of a new conflict that will prove no exception. The First Order has risen from the ruins of the Galactic Empire, and mobilizes for war with the New Republic, armed with the horrific products of its secret research laboratories.

VEHICLE TECHNOLOGY

HYPERDRIVES



Hyperdrives allow ships to travel faster than light, crossing the void between stars through the alternate dimension of hyperspace. Hypermatter particles hurl a ship into hyperspace while preserving its mass/energy profile, sending it along a programmed course until it drops back into normal space at its destination. Large objects in normal space cast "mass shadows" in hyperspace, so hyperspace jumps must be precisely calculated to avoid deadly collisions.

GRAVITY



A number of galactic technologies work by manipulating gravity. Repulsorlifts allow a craft to hover or fly over a planet's surface by pushing against its gravity, producing thrust, while acceleration compensators keep starship crews alive during high-speed maneuvers. Tractor beams manipulate gravitational forces to push or pull objects, while interdiction fields create gravitational shadows that interfere with faster-than-light travel, pinning ships in normal space or yanking them out of hyperspace.

SENSORS



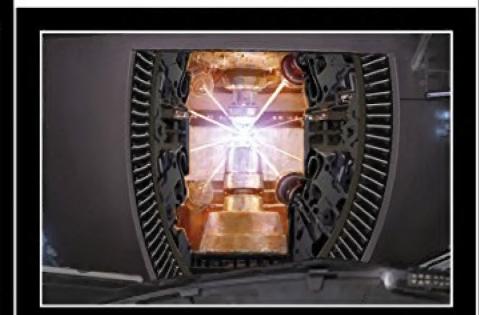
Sensors gather information about the area surrounding a vehicle, highlighting threats and hazards. Passive-mode sensors repeatedly scan the same area, scan-mode sensors have a longer range and collect data by emitting pulses in all directions, and search-mode sensors focus on a specific area for analysis. Data accumulated from scans is then fed into a sensor computer and relayed to a vehicle's operator. Most starships have sensor suites that analyze a wide range of spectra.

ENERGY WEAPONS



Laser cannons and turbolasers are based on the same principle as handheld blasters: energy-rich gas is converted to a glowing particle beam that can melt through targets. The largest such weapons are powerful enough to crack a planet's core. Starships also use ion cannons, which overwhelm electronic systems with ionized energy bursts, and physical ordnance such as concussion missiles and proton torpedoes, whose energy warheads release clouds of high-velocity proton particles.

POWER SOURCES



Vehicles use a range of power technologies, most of which date back to the Republic's earliest days. The most common are chemical, fission, or fusion reactors, which consume a variety of fuels based on local resources. Large starships opt for fusion systems that contain hypermatter-annihilation cores, generating vast amounts of power. Many starship fuels are hazardous to organic beings, circulating in ship systems as corrosive liquids or combustible and poisonous gases.

SHIELDS



Shields are protective force fields that repel solid objects or absorb energy. Concussion shields repel space debris, while two varieties of deflector shield protect craft in battle. Ray shields deflect or scatter energy beams, while particle shields diffuse impacts from high-velocity projectiles and proton weapons. A shield's intensity gradually diminishes with distance from its projector. Most starships use a combination of ray and particle shielding for the most reliable protection.



STORMTROOPER TRANSPORT

THE FIRST ORDER'S stormtroopers know no family except their fellow soldiers, and have trained from childhood with a variety of weapons, practicing combat tactics until they can execute any military maneuver with unthinking precision. The First Order's assault landers can deliver two full squads of troopers to the battlefield for ground operations. These no-frills vehicles ferry troops from orbit and forward bases to drop zones, then return when combat is complete to pick up the survivors. For defense, assault landers rely on their shields, tough armor, and a single gunner occupying a dorsal turret.

augmenter and

Searchlight

FWMB-10

repeating

blaster provides

covering fire

(dazzles enemy)

BATTLEFIELD VIEW A pilot guides the assault lander to its o

emergency hatch

A pilot guides the assault lander to its drop zone from a cockpit elevated for maximum visibility. As veterans of duty in TIE fighters, assault lander pilots are not troubled by this exposed vantage point, though they do complain that the landers are far less maneuverable than starfighters. If the pilot's control connections are severed, the assault lander can also be flown from a console inside the craft, but this backup system offers far less precision than the primary controls.

Main forward deflector

Minimal lighting to projector preserve trooper

night vision

Exit ramp

Ramp actuator

QUICK DEPLOYMENT

First Order stormtroopers deploy the instant

their craft's boarding ramp is lowered, with

skirmishers rushing out to establish a perimeter

as the rest of the troops emerge. Two squads

operations in as little as 30 seconds, allowing

can clear their vehicle and begin combat

their lander to evacuate the drop zone.

Troopers disembark

in standard twoabreast formation

Voids contain inert gas to dampen blaster impocts

Elevating footplate raises gunner into position

sensors

Cockpit positioned to maximize

landing zone visibility

Pilot viewport

Top-cover gunner position

(can be remotely operated

Blaster turret

from crew compartment)

Hatch to crew
compartment

____ Robust landing gear for hard landings

acceleration

chamber

Electromagnetic thrust vectoring fins

deployed troops, with the pilot acting as spotter to identify any threats.

PROTECTIVE FIRE

A single gunner protects the assault

lander during its final approach to the

an elevated turret whose rotating mount

The gunner maintains his or her position

drop zone, scanning the terrain from

provides a 240-degree field of fire.

until the drop zone is secured by the

DATA FILE

> MANUFACTURER Sienar-Jaemus Army Systems

ducting

- > MODEL Atmospheric Assault Lander (AAL)
- > CLASS Troop transport
- > LENGTH 17.83 meters (58.49 feet)
- > CREW 1 pilot, 1 gunner, and up to 20 stormtroopers
- > WEAPONS 1 Sienar-Jaemus F-ZO antipersonnel blaster cannon
- > AFFILIATION First Order

Smooth, armored hull designed to deflect blaster fire

protects engines from incoming fire

processing and life

support system

SJAS-210 sublight

ion engines kept

powered up for

rapid extraction

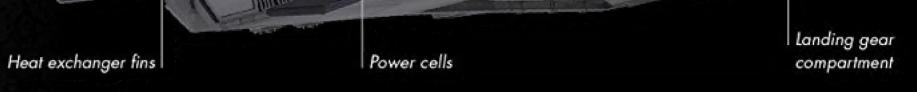
Ion drive

thruster

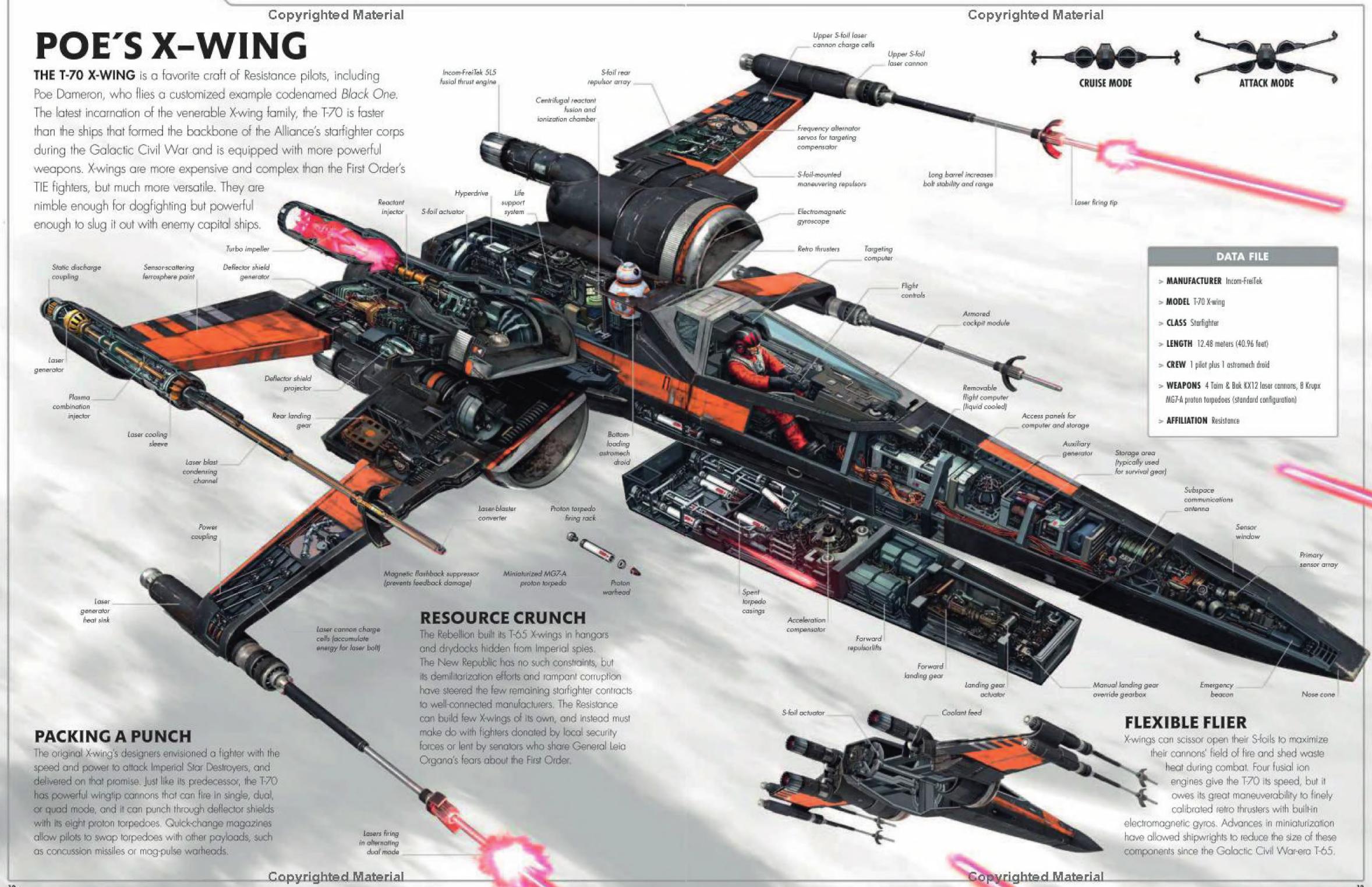
Reactant ducts

Acceleration

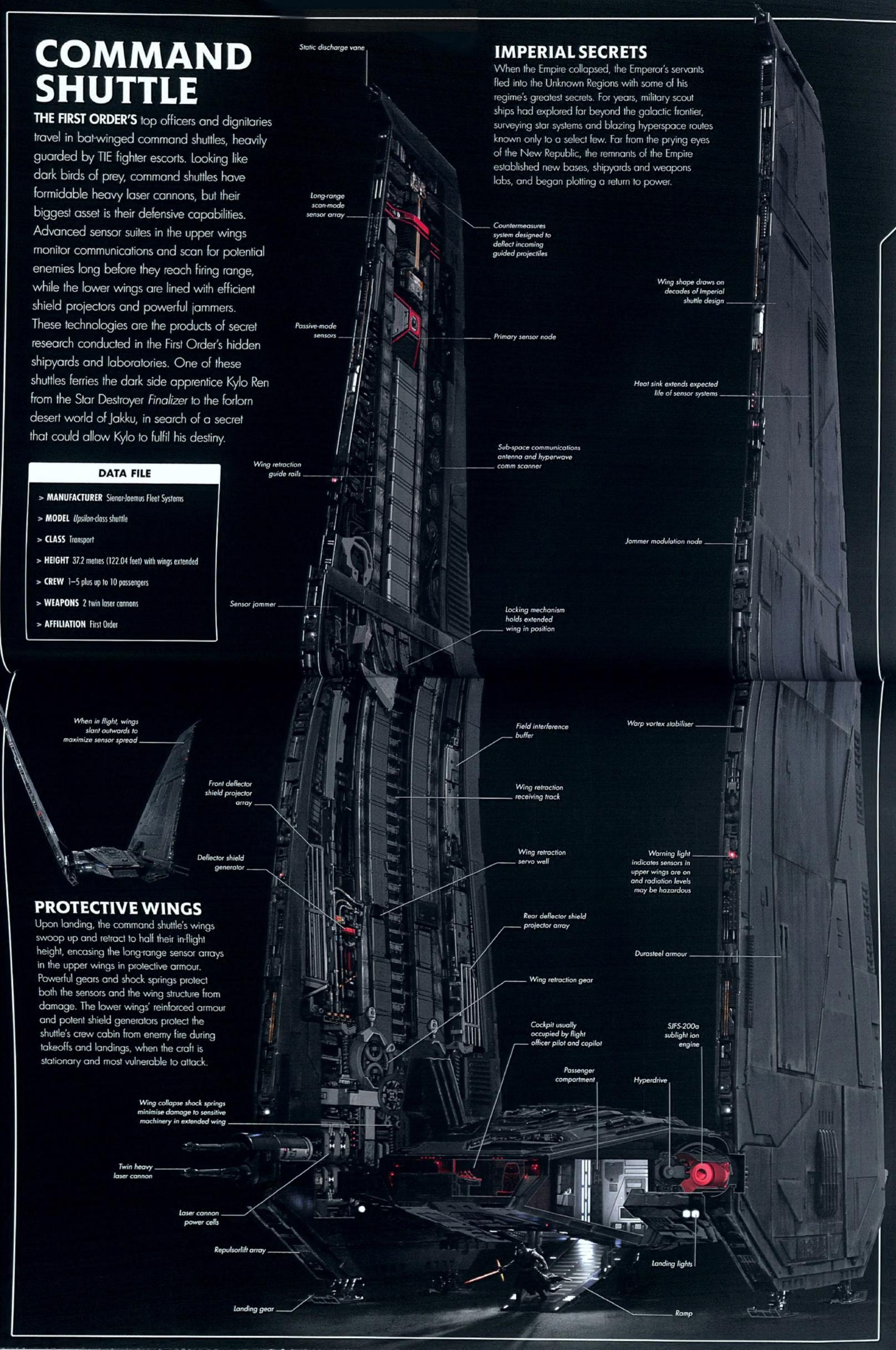
and pumps





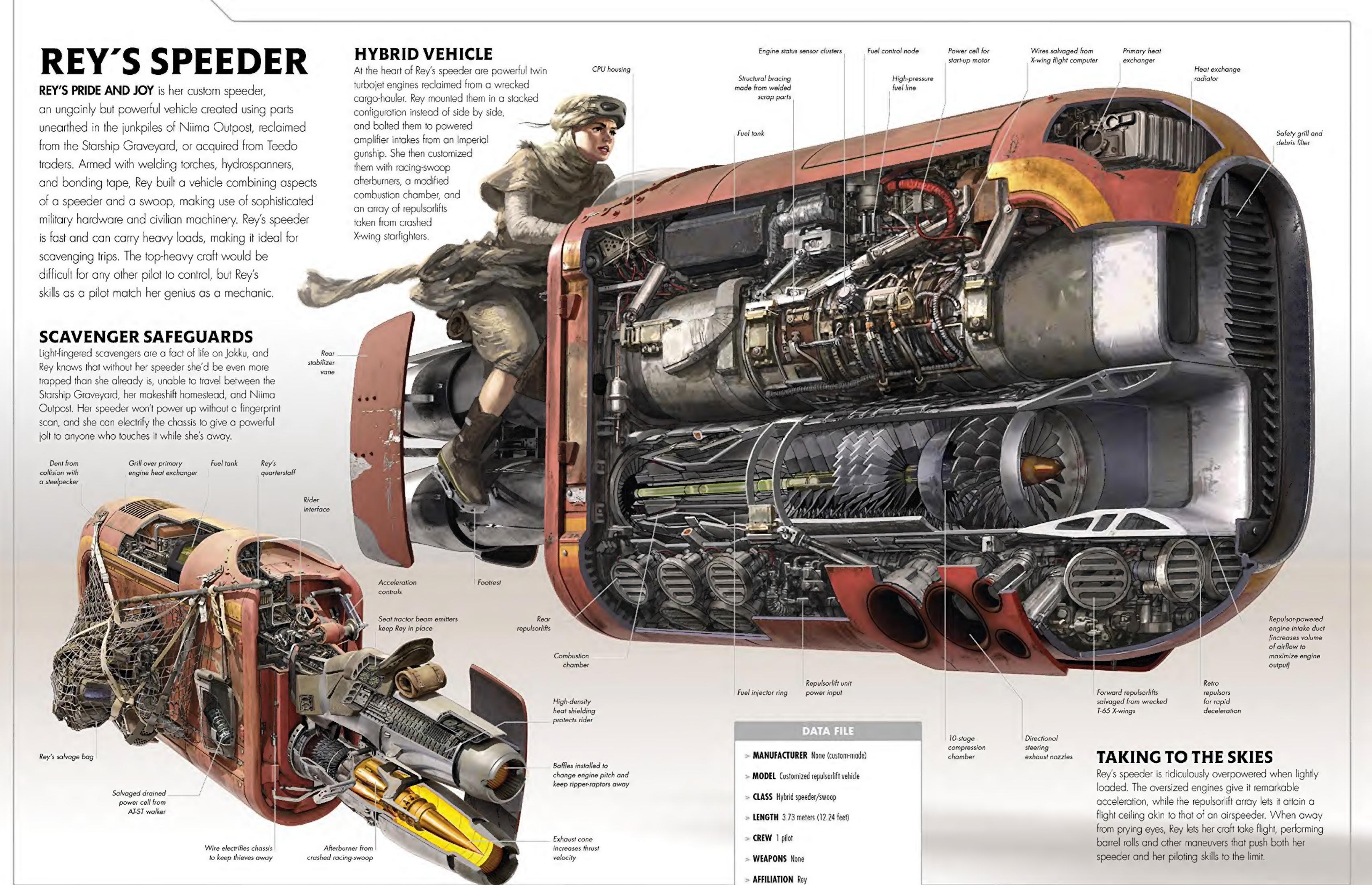






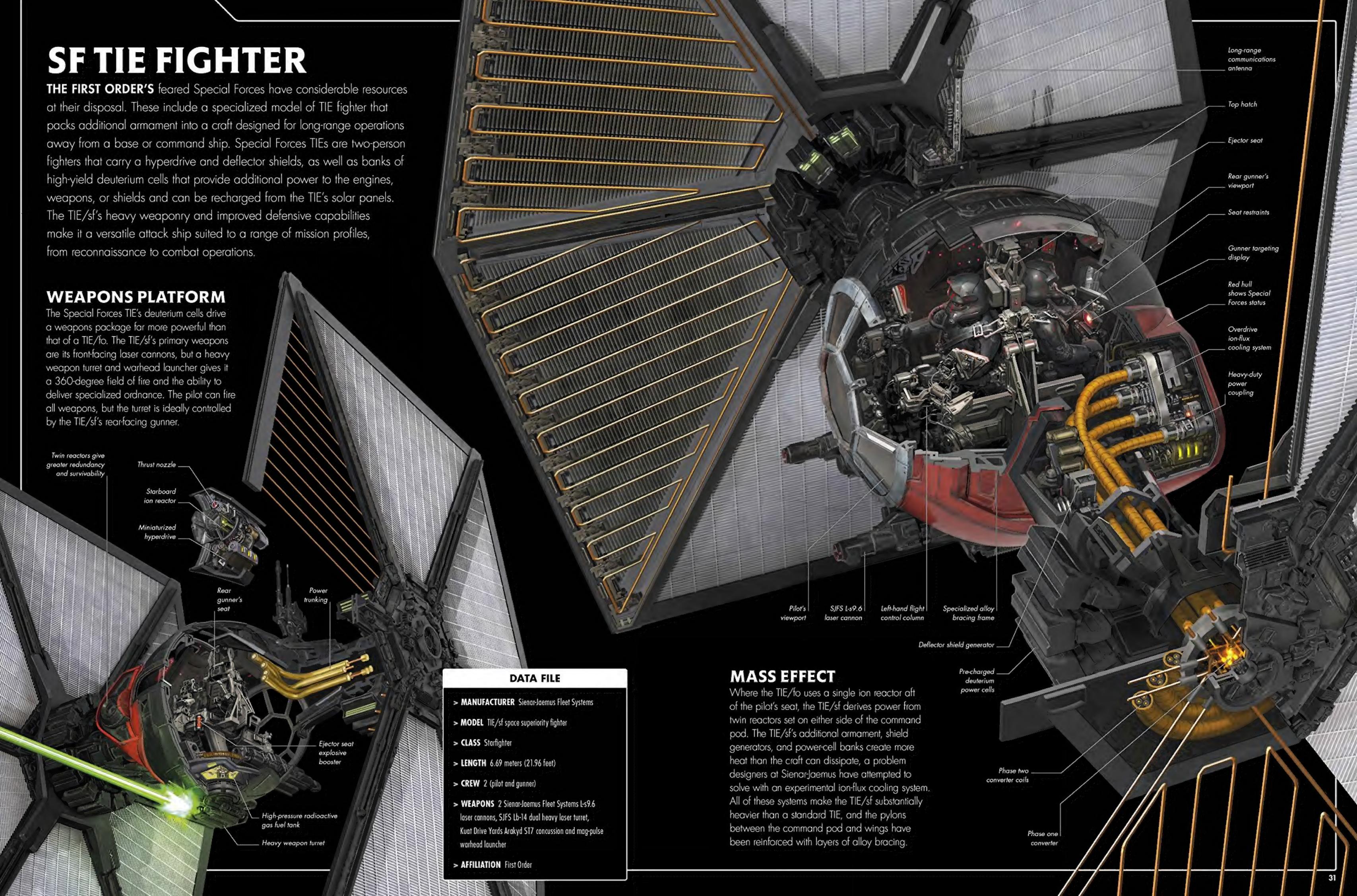


FINALIZER SYMBOL OF POWER The First Order lacks the resources to build huge numbers of massive capital THE POWERFUL FLAGSHIP used by General Hux and Kylo Ren, the Upper habitation levels ships like those that once served the Emperor. But the lessons of Imperial reserved for senior Finalizer is the first of the new Resurgent-class Star Destroyers, whose size power have not been lost on the First Order's ship designers. The Finalizer is command staff a devastating weapons platform and highly effective carrier, but it is also a is put out of action) and firepower clearly violate the treaties between the New Republic and symbol of the new regime's power, designed to recall the era when Imperial First Order governing capital ships. The Finalizer's heavy weapons are might was at its greatest, and inspire awe in the First Order's enemies. augmented by two wings of starfighters, a hundred assault craft and a full legion of stormtroopers trained since birth for loyalty to the First Order. Many in the New Republic dismiss sightings of these ships as typical Resistance fearmongering. But Leia Organa knows the Resurgent-class is all too real, and her operatives obsessively track reports of these warships. Central void contains flight deck · 上下的位。同时回回。"别世界在这里的 turbolaser battery shuttle (docked) __ SJFS III-ala primary hypermatterannihilation reactor Prefabricated ground base sections for rapid deployment Missile silo hatch Ventral missile turret **DATA FILE MILITARY MIGHT** > MANUFACTURER Kuat-Entralla Engineering **EVOKING THE PAST** Launcher retracts into heat exchanger Massive turbolaser turrets and heavy ion Star Destroyer's SECRETS OF THE ORDER > MODEL Resurgent-class Star Destroyer cannons dot the flanks of the Finalizer's upper While its size evokes the command ships of the Empire, the The Resurgent-class's turbolasers deliver more firepower Finalizer's design recalls those of Republic-era capital ships hull, with an additional brace of forward > CLASS Star Destroyer launching rack than Imperial-era weapons and boast a faster recharge batteries set on either side of the bow. from the Clone Wars. Her dorsal flight deck, side hangars rate. This advantage stems from kyber focusing crystals > LENGTH 2,915.81 metres (9,566.29 feet) and prominent keel are similar to elements of the Venator-Designed for orbital assaults and slugging harvested from a secret source deep in the Unknown entrance class Star Destroyer, reflecting a renewed appreciation matches with enemy capital ships, these > CREW 19,000 officers, 55,000 enlisted, 8,000+ main engine thrust nozzle Regions. Other First Order captains have clamoured for among First Order tacticians for capital ships' role as carriers. turbolasers can overload shields, punch upgrades to their own warships, but military-grade Hangar flight control bridge The Finalizer can launch her full complement of starfighters through thick armour and reduce planetary crystals are in short supply. Rumours abound that they > WEAPONS More than 3,000 turbolasers and ion cannons Main engine _ magnetic turbine and assault ships much more quickly than her predecessors surfaces to molten slag. Smaller point-defence are delivered to secret weapons labs, forbidden to all turrets and missile emplacements complement > AFFILIATION First Order in the Imperial Navy could. Other Imperial-era design flaws Secondary _ thrust nozzle but the First Order's uppermost ranks. have also been rectified - the need for a better-protected these heavy weapons, tracking more nimble Targeting sensor Coolant silo . command bridge with increased redundancy in command enemies, while the Finalizer's TIEs stand and pumps and control systems was a hard lesson learned from the loss ready to destroy starfighters ship-to-ship. of the Executor at the Battle of Endor. starboris.galeon.com starboris.galeon.com









QUADJUMPER

ORBITAL TRANSFER YARDS are busy places, where every second

A TUGGER'S LIFE

Captains of bulk freighters boast of flying from one side of the galaxy to the other, but most are helpless when it comes to seeing cargo across the final few kilometers between their hulls and pilots, and depends on their skill with throttles, control yokes, and tractor-beam emitters. Spacetug pilots are noticed only when they're in the way, and take perverse pride in that fact.

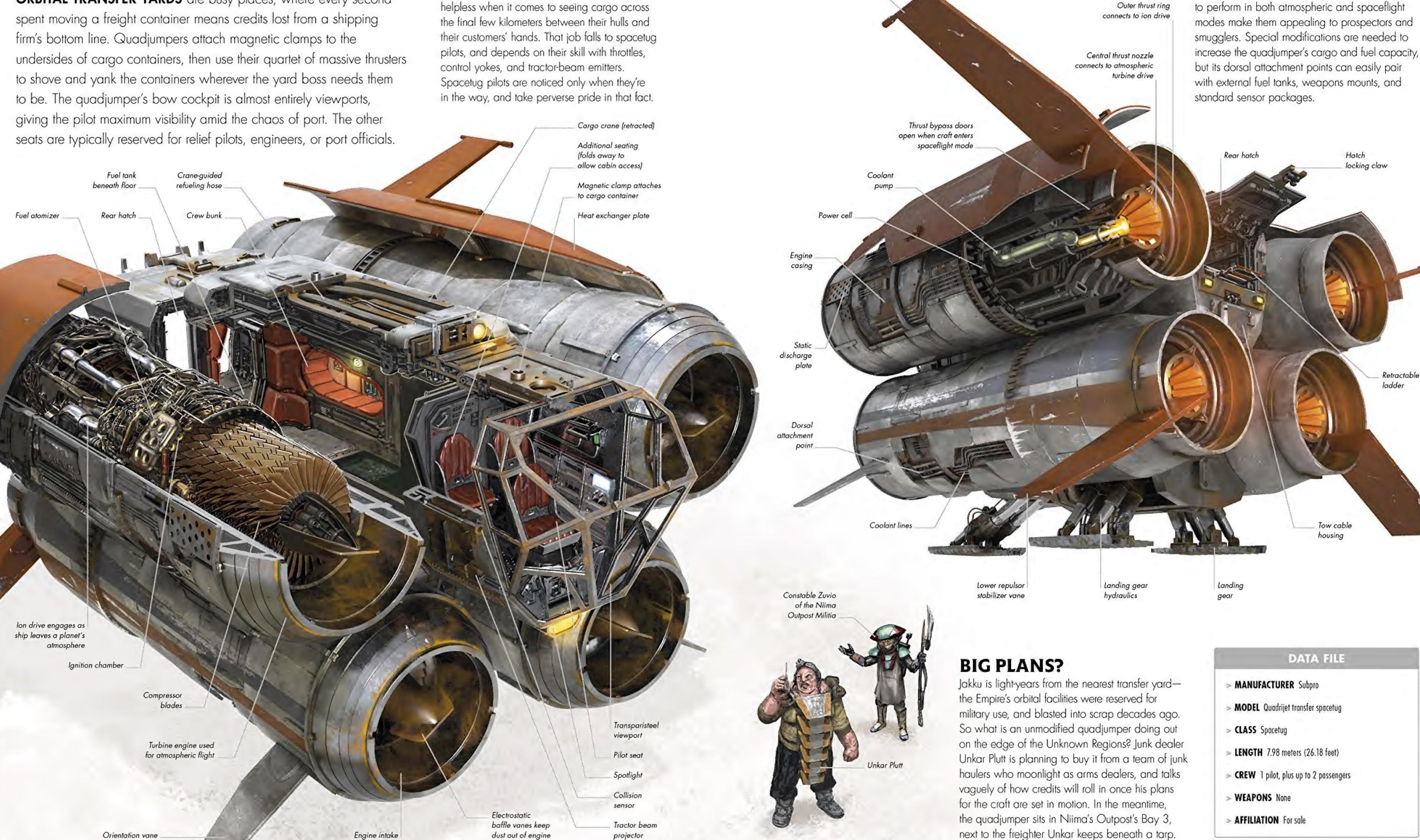
Upper repulsor stabilizer vane Though quadjumpers are designed and sold as tugs, their power, maneuverability, and ability Outer thrust ring connects to ion drive Central thrust nozzle connects to atmospheric turbine drive Thrust bypass doors open when craft enters spaceflight mode Power cell Coolant lines Landing gear Lower repulsor Landing Constable Zuvio hydraulics stabilizer vane of the Niima Outpost Militia **BIG PLANS?** Jakku is light-years from the nearest transfer yard—

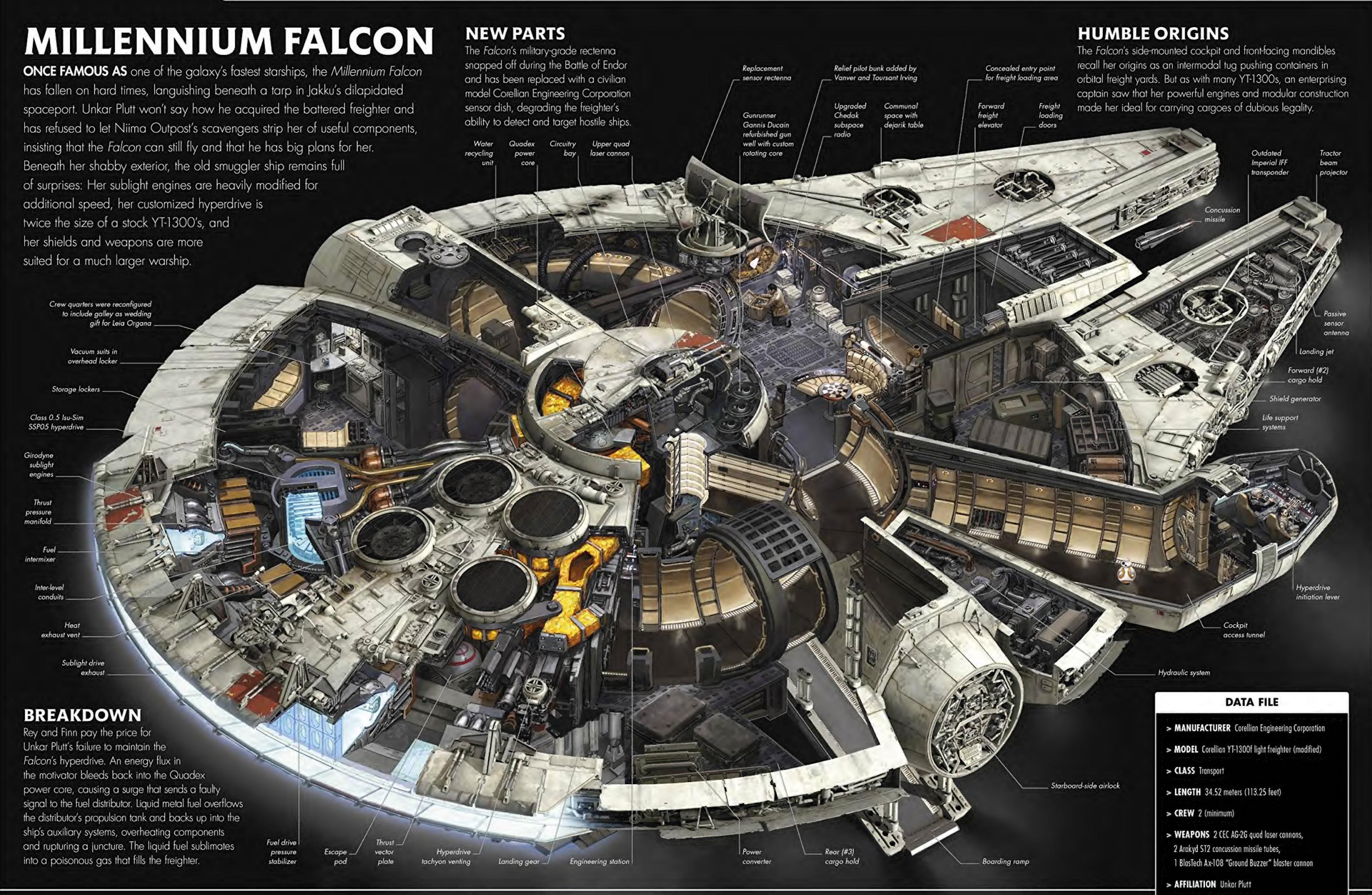
SPECIAL MODIFICATIONS

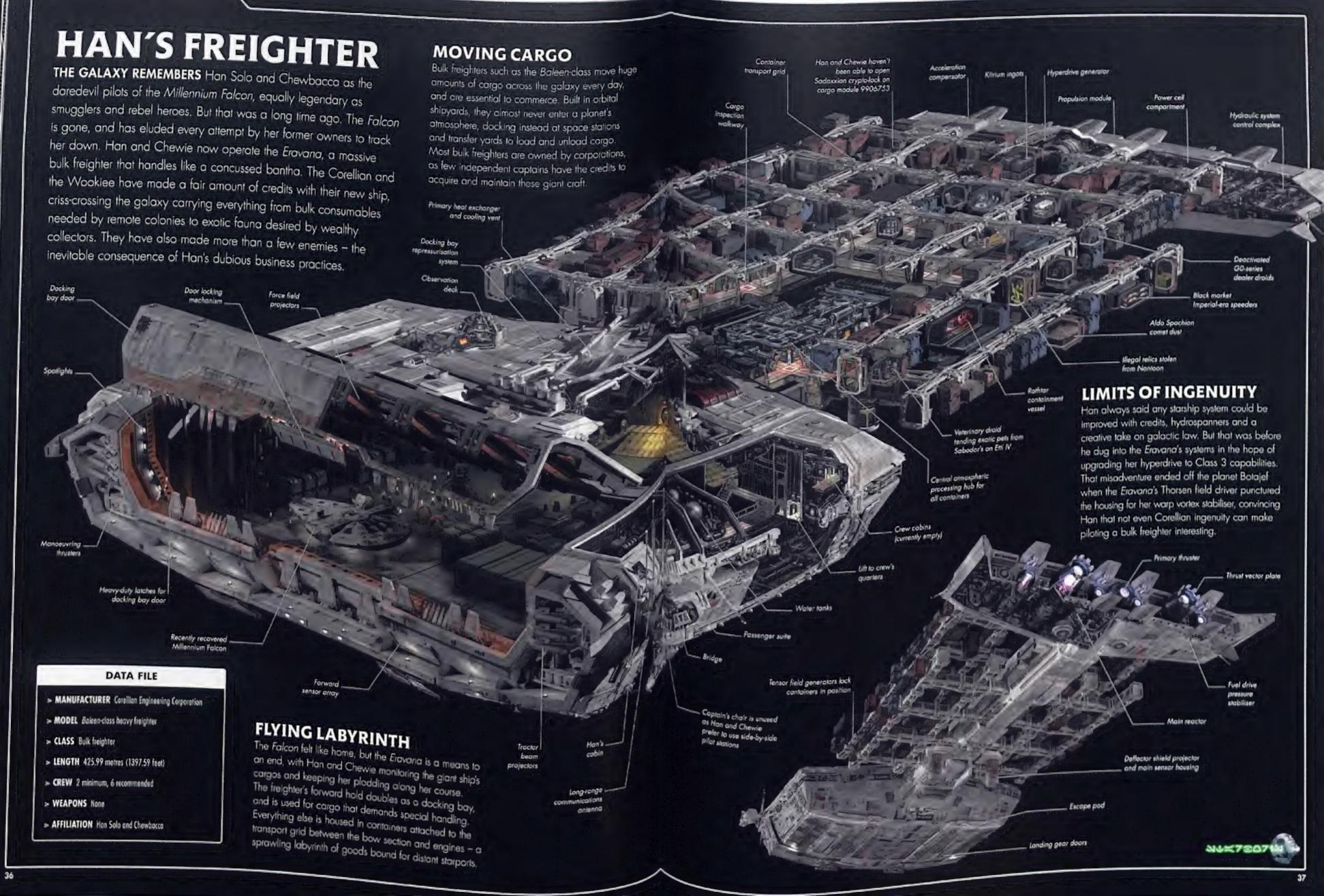
locking claw

Retractable

- MODEL Quadrijet transfer spacetug









RESISTANCE TRANSPORT

THE ODD APPEARANCE of the Resistance's transports reflects their unorthodox origins and construction. The craft have been cobbled together by Resistance technicians from a hotchpotch of systems bought, begged and stolen. Parts scrounged from scrapped B-wing Mark II's have been fitted to engine pods from Republic-era shuttles, attached to civilian passenger modules and augmented with knockoffs of hyperdrives created for the First Order. Techs bemoan frequent breakdowns but keep these ungainly craft flying, knowing they may be needed at a moment's notice.

CIVILIAN COMPARTMENTS

Resistance transport passengers ride inside two modular compartments connected and encased within a shell of surplus hull plating. Such compartments are commonly found in a variety of configurations aboard freighters and cut-price starliners catering for travellers on a tight budget. Resistance troops and commanders alike share space with gear lockers and astromech droids, enduring the rough ride with whatever good humour they can muster.

Deflector shield

Astromech monitors

hyperspace jumps

ship systems and calculates

Passenger terminals

projector

Deployed

landing gear

Sublight drive thruster Additional rear passenger compartment attaches to main module Rear compartment can be sealed off in case of emergency Landing gear hatch

Modified civilian

passenger compartment

TANDEM ENGINES

plasma feeds

SJFS S/min 12a

hyperdrive (design

stolen from First Order)

For propulsion, Resistance transports rely on aftermarket en prepods taken from Republic-era Montura-class shuttles: known to be sturdy and reliable. Two miniaturised hyperdrives reverse engineered from First Order designs allow for faster than light travel. Control linkages threaded between the passenger compartments connect the engine pods, but breakdowns. are common and most transports carry extremes his trastener navigational data and keep the twin units in sync

power generator

Deflector shield Deflector shield Precision EL-16HFE

Leia Organa

POTENT DEFENCES

Resistance transports manoeuvre poorly and depend on starfighter escorts to intercept attackers. Should this defence fail, however, the transports can put up a tough fight. The weapons pod features surplus B-wing ordnance, combining a heavy laser cannon with a precision targeting laser. Some transports add an ion cannon and proton torpedo launcher to this pod, and a mount beneath the cockpit can accommodate two auto-blasters. Deflector shield projectors removed from B-wing nacelles protect the cockpit and weapons pod, with their overlapping fields shielding the passenger compartments.

DATA FILE

- MANUFACTURER Slayn & Korpil
- MODEL Customised Resistance transport
- > CLASS Transport

Resistance

honour guard

- > WIDTH 16.18 metres (53.08 feet)
- CREW 1 pilot plus up to 20 passengers
- > WEAPONS 1 Gyrhil R-9X heavy loser cannon (standard)
- > AFFILIATION Resistance

Rack-suspended Power Multi-layered interference shielding generator **NOT FOR ROOKIES** Transport pilots control their craft from a repurposed B-wing Mark II cockpit locked in place and restructured to allow for a docking hatch. The B-wing's life-support systems and Pilot escape hatch/ port docking hatch portside deflector shield projectors have been relocated Life support Sensor Cockpit salvaged systems from B-wing Mark II

power feed

to within the adjacent cowling. This has reduced cockpit visibility, forcing the pilot to rely on holographic visual displays and a sensor suite to see the surrounding terrain.

SNOW SPEEDER

THE FIRST ORDER USES these versatile light utility vehicles for a range of missions on the Starkiller Base, from patrolling the perimeter to resupplying outlying stations with equipment.

The snow speeder is a simple and rugged model: basically a pair of seats, a platform for cargo, repulsorlifts and two turbines. Similar speeder trucks are a common sight on many worlds, but the military model favoured by the First Order has a higher-capacity generator than civilian craft, upgraded power converters and a mount and cable trunking to support a repeating blaster.

TOUGH ENOUGH

easily removed and stowed for routine missions, with the speeder's

prow instead used to transport equipment. Even while seated, the

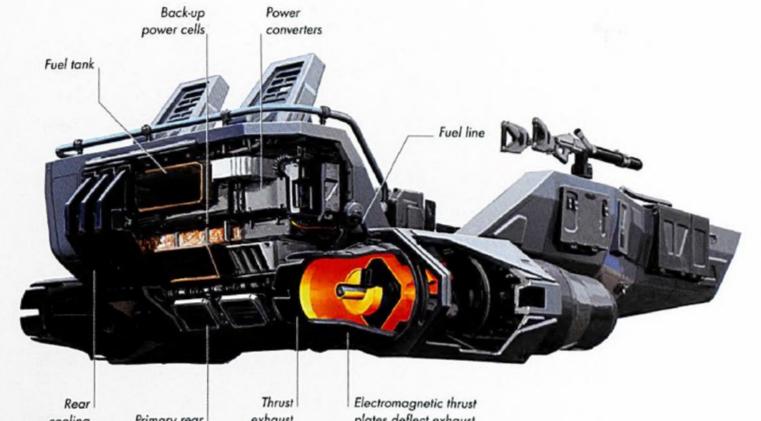
occupants are exposed to the elements and depend on heating

coils built into their seats and thermal units behind them.

Extra fuel

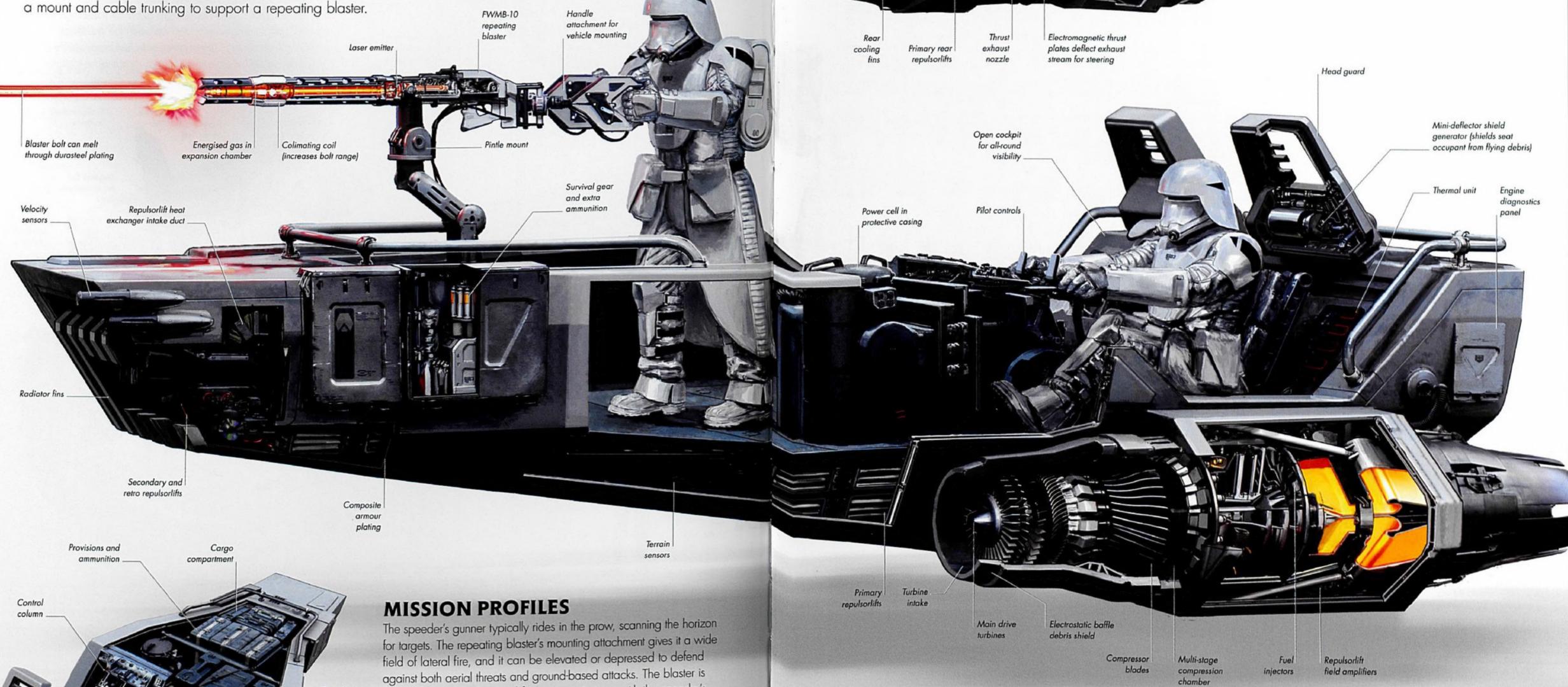
Seat tractor

Temperature extremes are tough conditions for repulsorlift craft. Radiator fins dissipate the heat produced by power generators, but can fail to keep up in hot climates and shed too much heat in cold ones, resulting in generators burning out or locking up. The rugged snow speeder required little adaptation for the Starkiller Base, however: its radiator fins were insulated to dampen the heat exchange and electrostatic baffles were added to keep ice particles out of the turbine intakes.

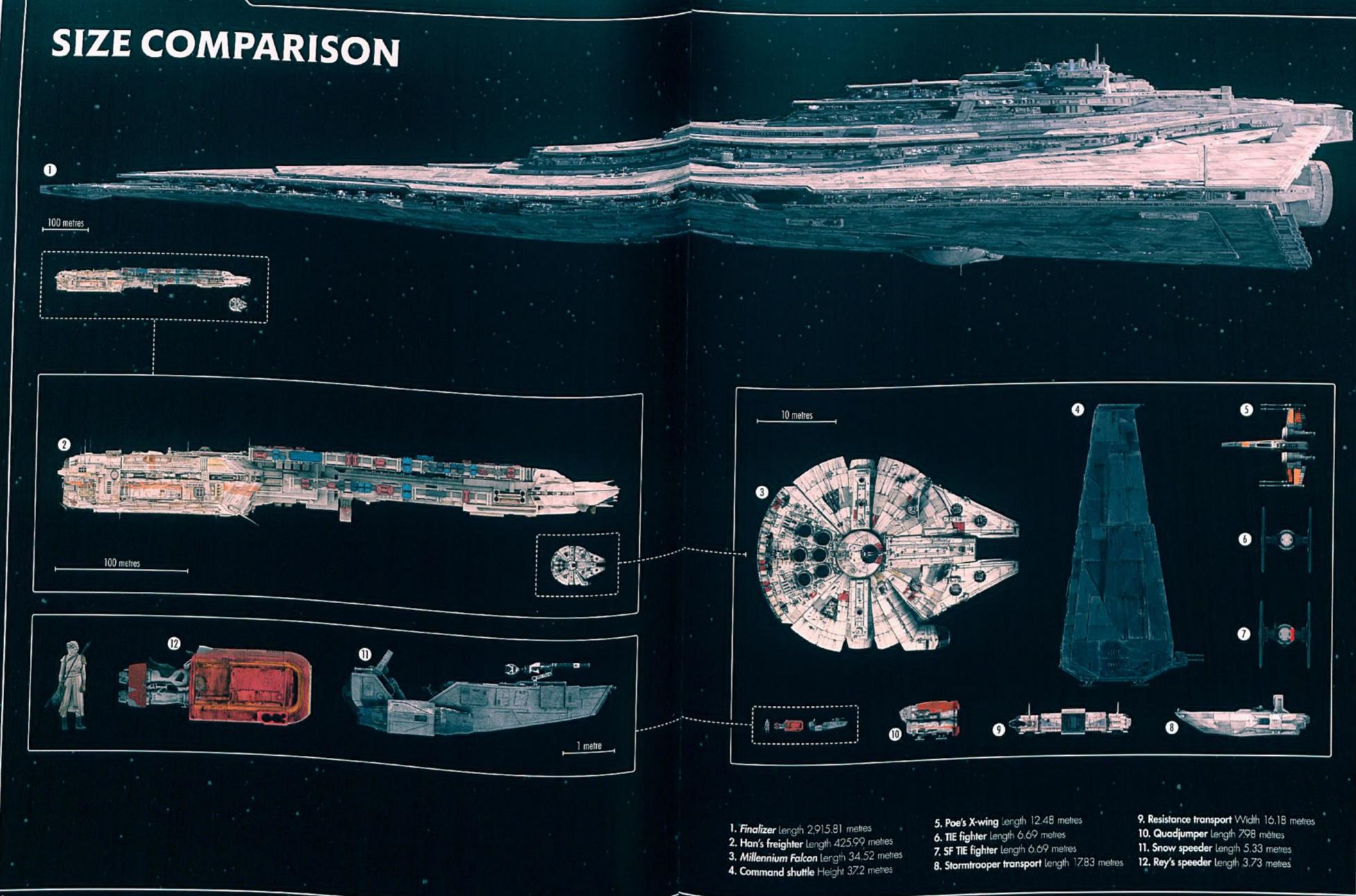


DATA FILE

- > MANUFACTURER Aratech-Loratus Corporation
- > MODEL Light Infantry Utility Vehicle (LIUV)
- > CLASS Speeder
- > LENGTH 5.33 metres (17.47 feet)
- > CREW 2 (standard complement) or 3 (maximum)
- > WEAPONS 1 FWMB-10 repeating blaster
- > AFFILIATION First Order









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